What Is Claimed Is:

1. A human monoclonal antibody capable of immunoreacting with human immunodeficiency virus (HIV) glycoprotein gp120 and neutralizing HIV, wherein the monoclonal antibody has the capacity to reduce HIV infectivity titer in an in vitro virus infectivity assay by 50% at a concentration of less than 700 nanograms (ng) of antibody per milliliter (ml), and wherein said monoclonal antibody binds mature gp120 preferentially over HIV precursor glycoprotein gp160.

2. The human monoclonal antibody of claim 1 wherein said concentration is less than 300 ng/ml.

3. The human monoclonal antibody of claim 1 wherein said concentration is less than 10 ng/ml.

4. The human monoclonal antibody of claim 1 wherein said antibody binds to a V1/V2 loop deficient-variant gp120 substantially less than native gp120.

5. The human monoclonal antibody of claim 1 wherein said HIV is a preselected first HIV strain and wherein said monoclonal antibody has the capacity to reduce said HIV infectivity titer of a second field strain of HIV by 50% at a concentration of less than 700 nanograms (ng) of antibody per milliliter (ml).

6. The human monoclonal antibody of claim 5 wherein said antibody has the capacity to reduce said HIV infectivity titer of a second field strain of HIV by 50% at a concentration of less than 300 ng/ml.

7. The human monoclonal antibody of claim 1 wherein said antibody is a Fab fragment.

8. The human monoclonal antibody of claim 1 wherein said antibody is a complete immunoglobulin IgG.

9. The human monoclonal antibody of claim 1 wherein the antibody has the binding specificity of a monoclonal antibody comprising a heavy chain

immunoglobulin variable region amino acid residue sequence shown in SEQ ID NO 66, and conservative substitutions thereof.

10. The human monoclonal antibody of claim 8 wherein the antibody has the binding specificity of a monoclonal antibody comprising a heavy chain immunoglobulin variable region amino acid residue sequence shown in SEQ ID NO 155, and conservative substitutions thereof.

11. The human monoclonal antibody of claim 9, wherein the monoclonal antibody has the binding specificity of a monoclonal antibody produced by ATCC 69079.

12. A polynucleotide sequence encoding a heavy chain immunoglobulin variable region amino acid residue sequence portion of a human monoclonal antibody according to claim 1, wherein the monoclonal antibody has the binding specificity of a monoclonal antibody comprising a heavy chain immunoglobulin variable region amino acid residue sequence shown in SEQ ID NO 66, conservative substitutions of the amino acid residue sequence, and polynucleotide sequences complementary thereto.

13. A host cell comprising the polynucleotide sequence of claim 12.

14. A DNA expression vector comprising the polynucleotide sequence of claim 12.

15. A method of determining immunocompetence of a human anti-human immunodeficiency virus (HIV) antibody in a sample comprising:

(1) contacting a sample believed to contain a human anti-HIV antibody with a diagnostically effective amount of the monoclonal antibody of claim 1 in a competition immunoreaction admixture containing mature gp120 in the solid phase;

(2) maintaining said competition immunoreaction admixture under conditions sufficient for said monoclonal antibody to bind with said gp120 in the solid phase and form a solid phase immunoreactant; and

(3) detecting the amount of said immunoreactant present in said solid phase, and thereby the immunocompetence of any human anti-HIV antibody in said sample.

16. A method of detecting human immunodeficiency virus (HIV) comprising contacting a sample suspected of containing HIV with a diagnostically effective amount of the monoclonal antibody of claim 1 and determining whether the monoclonal antibody immunoreacts with the sample.

17. The method of claim 16, wherein the detecting is in vivo.

18. The method of claim 17, wherein the monoclonal antibody is detectably labelled with a label selected from the group consisting of a radioisotope and a paramagnetic label.

19. The method of claim 16, wherein the detecting is in vitro.

20. The method of claim 19, wherein the monoclonal antibody is detectably labelled with a label selected from the group consisting of a radioisotope, a fluorescent compound, a colloidal metal, a chemiluminescent compound, a bioluminescent compound, and an enzyme.

21. The method of claim 19, wherein the monoclonal antibody is bound to a solid phase.

22. A method for providing passive immunotherapy to human immunodeficiency virus (HIV) disease in a human, comprising administering to the human an immunotherapeutically effective amount of the

monoclonal antibody of claim 1.

23. The method of claim 22, wherein the passive immunotherapy is provided prophylactically.

24. The method of claim 22, wherein the administering is parenteral administration.

25. The method of claim 24, wherein the parenteral administration is by subcutaneous, intramuscular, intraperitoneal, intracavity, transdermal, or intravenous injection.

26. The method of claim 24, wherein the parenteral administration is by gradual perfusion.

27. The method of claim 26, wherein the gradual perfusion is by intravenous or peristaltic means.

28. The method of claim 24, wherein the immunotherapeutically effective amount is from about 0.1 mg/kg to about 300 mg/kg.

29. A pharmaceutical composition comprising at least one dose of an immunotherapeutically effective amount of the monoclonal antibody of claim 1 in a pharmacological carrier.

30. A kit useful for the detection of human immunodeficiency virus (HIV) in a source suspected of containing HIV, the kit comprising carrier means being compartmentalized to receive in close confinement therein one or more containers comprising a container containing the monoclonal antibody of claim 1.